

Remarks/Arguments

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By this amendment, claims 9, 10, and 16 are amended. Claims 9-11, 16, and 18-23 are pending.

Claims 9, 10, and 16 are amended at the last paragraph to remove "hollow" before damping and to replace "body" with "unit". These amendments to claims 9, 10, and 16 are not done to further distinguish from the prior art and do not raise new issues that would require further consideration and/or search.

Claims 9, 10, and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Pohl. This rejection is respectfully traversed.

The M.P.E.P. sets forth the criteria for a rejection for obviousness under 35 U.S.C. §103 as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

See, M.P.E.P. § 706.02(j) *citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The proposed combination of Yamada and Pohl fails to establish a *prima facie* case of obviousness for the following reasons. Yamada discloses a damping

device 7 with an iron damper mass 8 and a rubber foot 10 that is mounted in the interior of a horn pad 6 of a steering wheel. The damping device 7 is switched ON when the engine is idling and switched off when the vehicle is moving. In particular, when the vehicle is moving, electromagnets 18 on the headlining section 16 of the horn pad are energized to bring the damper mass 8 into contact with them, so that the damper mass 8 is fixed. When the vehicle is idling, electromagnets 17 on the bottom plate of the horn pad 6 are energized to separate the damper mass from the electromagnets 18 and allow the damper mass to swing or rock to reduce the vibration of the steering wheel 2.

Pohl discloses a spring/mass vibratory force coupler that couples masses to a reference mass 12. The spring/mass vibratory coupler comprises a vibratory mass 11, a damper 111 and two springs 17, 18 (see claim 1 and paragraph [0012]).

There is no suggestion or motivation to modify Yamada with the teachings of Pohl. There is nothing in Yamada or Pohl, or in the knowledge of one of ordinary skill in the art to suggest combining the reference teachings of Yamada and Pohl as proposed in the rejection of claims 9, 10, and 16. Pohl discloses that the spring/mass vibratory force coupler can be used in machines of all kinds but none of the machines mentioned in Pohl is even remotely related to a steering wheel. The office action merely states that it would be obvious to one of ordinary skill in the art at the time the invention was made to substitute the damper of Pohl for the damper assembly of Yamada as an alternate means of damping the steering wheel, and that an electrorheological type of damping means would allow for variable damping, electrically adjustable spring characteristics and electrically adjustable variable

natural frequencies to provide better overall damping to the steering wheel. However, one of ordinary skilled in the art would recognize that there is no need to substitute the damper element 111 of Pohl in the damping device 7 of Yamada in the manner taught by Pohl. The damper element 111 in Pohl is one element of the spring/mass vibratory force coupler that is merely designed to make a rigid or damped coupling. The damping device 7 of Yamada does not perform any coupling function. On the contrary, the damper mass 8 of Yamada is designed to separate from the electromagnetic elements 18 within the horn pad 6 and also rock when the damping unit 7 operates. It is respectfully suggested that the combination of Yamada and Pohl only seems plausible after having the benefit of the Applicants' disclosure. The use of the teachings of the present invention to find obviousness is impermissible.

The court must be ever alert not to read obviousness into an invention on the basis of applicant's own statements; that is, we must view the prior art without reading into that art applicant's teachings. The issue, then, is whether the teachings of the prior art would, in and of themselves and without the benefits of appellant's disclosure, make the invention as a whole obvious.

In Re Sponnoble, 160 USPQ 237 at 243 (CCPA 1969) (emphasis in original).

Therefore, there is no suggestion or motivation to modify Yamada with the teachings of Pohl and for this reason alone the proposed combination of Yamada and Pohl fails to establish a *prima facie* case of obviousness.

The proposed combination of Yamada and Pohl does not teach or suggest all of the claim limitations of either claim 9, 10, or 16. In particular, neither Yamada nor Pohl teach or suggest an electrical control unit coupled with the damping unit that is

able to alter the vibration frequency of the damping unit such that different vibration frequencies can be damped. The Examiner cites column 3 and the bottom 4 lines of paragraph [0037] in Pohl to show that Pohl discloses such an electrical control unit coupled with the damping unit. However, this portion of the specification discloses that damped or rigid coupling of the spring to the vibratory mass is made possible, when a voltage is applied to change the viscosity of the ERF 311. Pohl does not disclose an electrical control unit coupled with the damping unit that is able to alter the vibration frequency of the damping unit such that different vibration frequencies can be damped. No damping per se of different vibration frequencies is achieved by the coupling element. Thus, for this reason alone, the proposed combination of Yamada and Pohl fails to establish a *prima facie* case of obviousness.

Further, there is not a reasonable expectation of success of combining the teachings of Pohl with Yamada. As previously mentioned, the damper element 111 of Pohl is designed to couple the spring 17 or 18 and reference mass 12 to the vibratory mass 11. As depicted in Fig. 1, the piston rod 22 is connected to the vibratory mass 11. The damper element of Pohl is designed to be permanently attached to the masses and not rock. By contrast, the horn pad 16 of Yamada is specifically designed to have a damper mass 8 be disconnected and spaced from the head-lining section 16 so that the damper mass 8 is allowed to rock or swing to reduce the vibration of the steering wheel 2. Hence, if the damper element of Pohl is incorporated into Yamada, the damper element would not disengage from the electromagnets 18 and rock. The use of the damper element of Pohl would adversely affect the principle operation of Yamada.

Further, the damper unit of Pohl is large compared with the damper of Yamada and possibly would not fit in the horn pad 6. In fact, in order to combine Yamada and Pohl, one of ordinary skilled in the art would probably need to use Pohl's vibratory force coupler in its complete form as shown in Fig. 1, which includes the mass 11 arranged outside the hollow damping body and the springs 17, 18. Yet, there is not enough room in the horn pad 6 of Yamada to accommodate all of the elements of the vibratory force coupler of Pohl. Therefore, there is not a reasonable expectation of success of combining the teachings of Yamada with Pohl and for this reason alone, the proposed combination of Yamada and Pohl fails to establish a *prima facie* case of obviousness.

For the reasons set forth above, the teachings of the Yamada and Pohl references are not sufficient to render claims 9, 10, and 16 *prima facie* obvious, and thus, claims 9, 10, and 16 are allowable.

Claims 11, 19-21, and 23 depend from claim 9 and are therefore allowable as depending from an allowable claim and for the specific features recited therein. Claims 18 and 22 depend from claim 16 and are therefore allowable as depending from an allowable claim and for the specific features recited therein.

In addition to the above mentioned reasons, claim 10 should be allowed for the feature that the damping unit includes a hollow damping body made of an elastic material. Neither Yamada nor Pohl disclose or suggest this feature. For the proper functioning of the damper element of Pohl, the outer housing of the damper element must be rigid. Otherwise, the resistance of the electrorheological fluid to the movement of the piston could not be adjusted with any precision to tune the

damping. The hatching on the drawings of Pohl indicate that the material is metal, which is generally rigid.

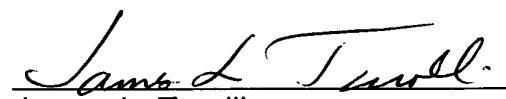
The Examiner alleges that housing 31 of Pohl inherently has some elasticity. However, metal is generally considered to be rigid and not made of an elastic material. Clearly, the housing 31 of Pohl does not have the properties of being not rigid, flexible, capable of ready change or easy expansion under the Examiner's definition of the term "elastic".

Further, under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to include the missing element if the missing element is "necessarily present" in the item described in the reference. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991). "Necessarily present" for inherency means more than merely probably or possibly present. Trintec Industries, Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295 (Fed. Cir. 2002). The Examiner states that "The damping element 31 of Pohl could possess any of these features and thus is still readable on this claim limitation". The applicant respectfully disagrees. The fact that the damping element 31 could possess any of the features as being elastic as mentioned does not mean that housing 31 of Pohl is inherently made of elastic material. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Therefore, claim 10 is allowable for this additional reason.

In view of the foregoing, it is respectfully submitted that the above-identified patent application is in condition for allowance, and allowance of the above-identified patent application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,


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